US006628610B1

(12) **United States Patent**
Waclawsky et al.

(10) **Patent No.: US 6,628,610 B1**
(45) **Date of Patent: Sep. 30, 2003**

(54) **METHODS AND APPARATUS FOR MANAGING A FLOW OF PACKETS USING CHANGE AND REPLY SIGNALS**

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(*). Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/340,524**

(22) Filed: **Jun. 28, 1999**

(51) **Int. Cl.**[7] **G06F 11/00**
(52) **U.S. Cl.** **370/229**; 370/235; 370/352
(58) **Field of Search** 370/229, 230, 370/232, 235, 236, 236.1, 255, 312, 352, 363, 383, 389, 390, 382, 395.21, 395.4, 395.41, 395.42, 432, 471, 473, 474, 477, 902, 912, 419, 420, 483, 524; 709/250

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(57) **ABSTRACT**

Techniques are provided for controlling a flow of packets in a data communications device. A first technique involves transferring packets of a particular packet flow based on an initial policy scheme, and planning a scheme change to change the initial policy scheme to a new policy scheme based on conditions within the data communications device existing while transferring the packets of the particular flow based on the initial policy scheme. The first technique further involves providing a change signal to the source of a particular packet flow (e.g., a sending host). The change signal indicates that the data communications device has planned the scheme change. Additionally, the first technique involves processing the scheme change based on either a reply signal from, the source or an absence of a reply signal from the source.

36 Claims, 6 Drawing Sheets